# STATEMENT OF CHAIRMAN KEVIN J. MARTIN

Re: Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices, File No. EB-08-IH-1518, WC Docket No. 07-52

Would it be OK if the post office opened your mail, decided they didn't want to bother delivering it, and hid that fact by sending it back to you stamped "address unknown – return to sender"? Or would it be OK, when someone sends you a first class-stamped letter, if the post office opened it, decided that because the mail truck is full sometimes, letters to you could wait, and then hid both that they read your letters and delayed them?

Unfortunately, that is exactly what Comcast was doing with their subscribers' Internet traffic.

Last year, some broadband subscribers complained to the FCC that Comcast was blocking and delaying their Internet traffic. Our investigation, and the findings of several widely respected engineers, confirmed the complaints. Comcast was delaying subscribers' downloads and blocking their uploads. It was doing so 24/7, regardless of the amount of congestion on the network or how small the file might be. Even worse, Comcast was hiding that fact by making effected users think there was a problem with their Internet connection or the application.

Today, the Commission tells Comcast to stop, and to disclose to its subscribers how it is going to manage traffic on a going forward basis. We therefore take another important step to ensure that all consumers have unfettered access to the Internet.

Over the past decade, the Internet has had a powerful impact on the economy and on the lives of American citizens. Thanks in large part to the deregulatory approach the Commission has employed, we have witnessed the fruits of increased innovation, entrepreneurship, and competition that the Internet has helped deliver. As policymakers, we have a duty to preserve and promote the vibrant and open character of the Internet while maintaining infrastructure companies' incentive to invest in providing faster broadband to more people.

The framework we adopt today will enable us to achieve this balance, and will send a message to the industry that bad actors will be punished. This is the same framework and approach that I proposed in my April testimony before the Senate Committee on Science, Commerce, and Transportation which is attached as an Appendix to this statement.<sup>1</sup>

We begin by affirming that the Commission can and will enforce the principle that consumers should be able to access any content and any application. This should come as no surprise. Three years ago the Commission declared that it would not hesitate to act if faced with evidence that a provider was violating this principle by blocking consumer access to content or applications. Last year the current Commission unanimously reiterated that we have "the ability to adopt and enforce the net neutrality principles ... announced in the Internet Policy Statement." Regardless of the dissenting Commissioners' intentions at the time, or their personal preference for a rulemaking now, the full Commission clearly put broadband operators on notice that we were ready, willing, and able to enforce the principles.

In fact, we've said this several times, including specifically telling Comcast. In the 2006 *Adelphia* Order, which the dissenting Commissioners voted for, the Commission clearly indicated it

<sup>&</sup>lt;sup>1</sup> Written Statement of the Honorable Kevin J. Martin, Chairman, Federal Communications Commission, Before the United States Senate Committee on Commerce, Science and Transportation (April 22, 2008) (attached as an Appendix).

would act on any complaints that it received about blocking or degrading Internet content. Specifically, the Commission stated:

"If in the future evidence arises that any company is willfully blocking or degrading Internet content, affected parties may file a complaint with the Commission."

In conducting such an analysis, we consider a variety of factors. The Commission considers whether the network management practice is intended to distinguish between legal and illegal activity. The Commission's network principles only recognize and protect user's access to legal content. The sharing of illegal content, such as child pornography or content that does not have the appropriate copyright, is not protected by our principles. Similarly, applications that are intended to harm the network are not protected.

The Commission also considers whether the network service provider adequately disclosed its network management practices. A hallmark of whether something is reasonable is whether an operator is willing to disclose fully and exactly what they are doing. Consumers need proper disclosure so that they can make informed decisions when purchasing broadband service.

Finally, if legal content is arbitrarily degraded or blocked, and the defense is "network management," the broadband operator must show that its network management practice is reasonable. We will look at whether it furthers an important interest and is carefully tailored to serve that interest. Also, the practice should be disclosed to consumers so that they can make informed decisions when purchasing broadband service.

Applying this framework, we find that it was unreasonable for Comcast to discriminate against particular Internet applications, including BitTorrent.

While Comcast claimed its intent was to manage congestion, the evidence told a different story:

- Contrary to Comcast's claims, they blocked customers who were using very little bandwidth simply because they were using a disfavored application;
- Contrary to Comcast's claims, they did not affect other customers who were also using an extraordinary amount of bandwidth even during periods of peak network congestion as long as he wasn't using a disfavored application;
- Contrary to Comcast's claims, they delayed and blocked customers using a disfavored application even when there was no network congestion;
- Contrary to Comcast's claims, the activity extended to regions much larger than where it claimed congestion occurred.

In short, they were not simply managing their network; they had arbitrarily picked an application and blocked their subscribers' access to it.

Comcast's lack of disclosure about its network management practices compounded the harm. Customers that experience unexpected problems with their connections may blame the connection or application. This is particularly troubling when the application is used to provide services that compete with the broadband operator's own services. Indeed, when faced with a similar situation with Internet telephony, we took quick action to stop a telecommunications carrier from blocking competitive VoIP providers.

Consumers demand, and deserve, better.

Our action today is not about regulating the Internet. Indeed, I have consistently opposed calls for legislation or rules to impose network neutrality. Like many other policy makers and members of Congress, I have said such legislation or rules are unnecessary, because the Commission already has the tools it needs to punish a bad actor. Instead, we take a cautious approach. Adopting broad regulations in this area could have unintended consequences that could stifle technological innovation. By acting on the complaints that we receive, we are able to deal with actual problems and avoid creating others.

That is what we do today. The specific practice Comcast was engaging in has been roundly criticized and not defended by a single other broadband provider.

If we aren't going to stop a company that is looking inside its subscribers' communications (reading the "packets" they send), blocking that communication when it uses a particular application regardless of whether there is congestion on the network, hiding what it is doing by making consumers think the problem is their own, and lying about it to the public, what would we stop? Failure to act here would have reasonably led to the conclusion that new legislation and rules are necessary.

We do not address pricing, unbundling, or other economic regulation.

We do not tell providers how to manage their networks. They might choose, for instance, to prioritize voice-over-IP calls. In analyzing whether Comcast violated federal policy when it blocked access to certain applications, we conduct a fact-specific inquiry into whether the management practice they used was reasonable. Based on many reasons, including the arbitrary nature of the blocking, the lack of relation to times of congestion or size of files, and the manner in which they hid their conduct from their subscribers, we conclude it was not.

We do not limit providers' efforts to stop congestion. We do say providers should disclose what they are doing to consumers.

We make clear that network operators can block any illegal content or applications that are intended to harm the network. The Order makes clear, for instance, that providers can block child pornography or pirated video and music. Indeed, blocking illegal content could reduce bandwidth congestion.

While concluding that the conduct at issue violates our policy was an obvious step, our action today is nevertheless critically important.

I am pleased that Comcast has reached an agreement with the company BitTorrent and has committed to implement a new "protocol-agnostic" management technique by the end of the year. And I note that we have decided not to issue a fine. But contrary to some claims, Comcast's agreement with the company BitTorrent did not obviate the need for us to act today.

First, BitTorrent was not a party to the proceeding. Consumer groups brought the complaint – not BitTorrent – and they and Comcast have not settled. As a basic issue of administrative law, we need to resolve the complaint. Comcast's agreement with a single company that uses the peer-to-peer protocol is not a substitute for addressing the consumer groups' complaint.

Second, it is important for the Commission to establish the important precedent that we will stop the bad actors. We establish a clear framework for how we will conduct our fact-intensive inquiries if situations arise in the future. If we had declined to act, as the dissenting Commissioners would have preferred, we would have provided certainty that broadband operators can block access and hide their actions from their own customers.

Third, we need to protect consumers' access. While Comcast has said it would stop the arbitrary blocking, consumers deserve to know that the commitment is backed up by legal enforcement.

Finally, particularly given the previous obfuscation Comcast engaged in to date, it is important that we require Comcast to respond to many still-unanswered questions about their new management techniques:

- What exactly do they mean by a "protocol agnostic" management technique?
- Will there be bandwidth limits?
- If so, what will they be?
- Will they be hourly? Monthly?
- How will consumers know if they are close to a limit?
- If a consumers exceeds a limit, is his traffic slowed? Is it terminated? Is his service turned off?

The Commission needs to understand the answers. Perhaps more importantly, Comcasts' subscribers deserve to know the answers.

These unanswered questions seem inconsistent with the disclosures that even the dissenting Commissioners agree are necessary.

The dissenters argue that the Commission should have conducted an investigation to find out the answers to these questions. We did. Our Enforcement Bureau sent Comcast a letter asking the company to respond to the allegations in the complaint and Comcast replied. Moreover, the Commission sought comment on petitions by Vuze and Free Press, which asked the Commission to rule on the same conduct at issue in the complaint and received more than 6,500 comments in response. In addition, the Commission held two public hearing on the complaint and the petitions. In total, the record contains more than 60,000 pages filling 15 banker boxes.

The fact that Comcast still has not come forward and disclosed the true nature of its network management practices, despite numerous opportunities to do so, cannot justify inaction on the complaint. Given the voluminous record evidence that Comcast engaged in unreasonable network management practices, it was incumbent upon us to order Comcast to stop the practices and disclose them to us. That is precisely what we are doing today.

In sum, by applying the framework we adopt today, the Commission will remain vigilant in protecting consumers' access to content on the Internet. Subscribers should be able to go where they want, when they want, and generally use the Internet in any legal means. When providers engage in practices truly designed to manage congestion, not cripple a potential competitive threat, they should not be afraid to disclose their practices to consumers.

# Written Statement Of

# The Honorable Kevin J. Martin Chairman Federal Communications Commission

Before the United States Senate Committee on Commerce, Science and Transportation

**April 22, 2008** 

Good morning Chairman Inouye, Vice Chairman Stevens, and Members of the Committee. Thank you for inviting me here today to provide my thoughts on the future of the Internet and the Commission's current role on some of the issues being discussed today.

Over the past decade, the Internet has had a powerful impact on the economy and on the lives of American citizens. We have witnessed the fruits of increased innovation, entrepreneurship, and competition that this technology has helped deliver. As policymakers, any rules of the road in this area must maintain an open and dynamic Internet that will allow it to continue to be an engine of productivity and innovation that benefits all Americans.

# I. FCC PRINCIPLES PROTECTING CONSUMER ACCESS TO THE INTERNET

The Commission has a duty to preserve and promote the vibrant and open character of the Internet as the telecommunications marketplace enters the broadband age. In 2005, the Commission adopted an Internet Policy Statement containing four principles. The Commission's goal was to clarify how it would evaluate broadband Internet practices on a going forward basis.

Specifically, the Commission established the following principles:

To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet,

- Consumers are entitled to access the lawful Internet content of their choice;
- Consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement;

- Consumers are entitled to connect their choice of legal devices that do not harm the network;
- Consumers are entitled to competition among network providers, application and service providers, and content providers.

The Commission explicitly noted that these principles were subject to reasonable network management.

The Commission was seeking to protect consumers' access to the lawful online content of their choice. The intent of these principles was to foster the creation, adoption and use of broadband Internet content, applications, and services, and to ensure that consumers benefit from that innovation.

# II. FCC's ROLE IN PROTECTING CONSUMERS AND ENFORCING OUR PRINCIPLES

As the expert communications agency, it was appropriate for the Commission to adopt, and it is the Commission's role to enforce, this Internet Policy Statement.

In fact, the Supreme Court in its Brand X decision specifically recognized the Commission's ancillary authority to impose regulations as necessary to protect broadband internet access.

I do not believe any additional regulations are needed at this time. But I also believe that the Commission has a responsibility to enforce the principles that it has already adopted. Indeed,

on several occasions, the entire Commission has reiterated that it has the authority and will enforce these current principles.

For example, in 2006 when I appeared before this Committee, then Chairman Stevens asked me whether the Commission had the existing authority to take action if a problem developed. And I responded that the Commission had authority under Title I to enforce consumers' access to the internet.

Moreover, almost exactly one year ago, the Republican Majority of the Commission, with the Democrat Commissioners concurring, committed to enforcing our existing principles and the policy statement. Specifically, in April 2007, the Commission expressly stated:

The Commission, under Title I of the Communications Act, has the ability to adopt and enforce the net neutrality principles it announced in the Internet Policy Statement. The Supreme Court reaffirmed that the Commission "has jurisdiction to impose additional regulatory obligations under its Title I ancillary jurisdiction to regulate interstate and foreign communications." Indeed, the Supreme Court specifically recognized the Commission's ancillary jurisdiction to impose regulatory obligations on broadband Internet access providers.

<sup>&</sup>lt;sup>1</sup> Broadband Industry Practices, WC Docket No. 07-52, Notice of Inquiry, 22 FCC Rcd 7894, 7896, para. 4 (2007) (internal footnotes omitted).

Finally, the Commission has already taken enforcement action in response to other complaints. In the Madison River complaint, the Commission ordered a telephone company to stop blocking VoIP calls.

Contrary to some public claims about Commission's approach generally, for the Commission to take enforcement action against a telephone company for blocking and degrading a particular application but refuse to pursue enforcement action against a cable company blocking or degrading a particular application would unfairly favor the cable industry.

I believe that the Commission must remain vigilant in protecting consumers' access to content on the internet. Thus, it is critically important that the Commission take seriously and respond to complaints that are filed about arbitrary limits on broadband access and potential violations of our principles. Indeed, I have publicly stated that the Commission stands ready to enforce this policy statement and protect consumers' access to the internet.

# III. FRAMEWORK FOR EVALUATING REASONABLE NETWORK MANAGEMENT COMPLAINTS

The Commission should address issues of appropriate network management using a consistent framework. There are several factors that I believe the Commission should use when analyzing complaints and concerns about network management practices by broadband operators.

First, the Commission should consider whether the network management practices are intended to distinguish between legal and illegal activity. The Commission's network principles

only recognize and protect user's access to legal content. The sharing of illegal content, such as child pornography or content that does not have the appropriate copyright, is not protected by our principles. Similarly, applications that are intended to harm the network are not protected.

Second, the Commission should consider whether the network service provider adequately disclosed its network management practices. A hallmark of whether something is reasonable is whether an operator is willing to disclose fully and exactly what they are doing.

Adequate disclosure of the particular traffic management tools and techniques -- not only to consumers but also to the designers of various applications and entrepreneurs – is critical.

Application designers need to understand what will and will not work on a particular network. For example, does an application developer know that the operator may actually insert reset packets during a session masking the network operator's identity?

Consumers must be fully informed about the exact nature of the service they are purchasing and any potential limitations associated with that service. For example, has the consumer been informed that certain applications used to watch video will not work properly when there is high congestion?

Particularly as broadband providers begin providing more complex tiers of service, it's critical to make sure that consumers understand whether broadband network operators are able to deliver the speeds of service that they are selling. For example, if Internet access is sold as an unlimited service, do consumers understand that if they use too much of it they can still be cut-off?

Finally, the Commission should consider whether the network management technique arbitrarily blocks or degrades a particular application. Is the network management practice selectively identifying particular applications or content for differential treatment? If so, I believe that we should evaluate the practices with heightened scrutiny, with the network operator bearing the burden of demonstrating that the particular practice furthered an important interest, and that it was narrowly tailored to serve that interest.

Such an approach would not mean that any action taken against a particular application would automatically be a violation. Rather, it would trigger a more searching review of both the particular concern and whether that network management solution was tailored to resolve the particular harm identified to the network in as narrow a manner as possible.

In a manner similar to the way in which restrictions on speech are analyzed, network management solutions would need to further a compelling or at least an important/legitimate interest and would need to be tailored to fit the exact interest. Such practices should not be overly broad in their application so that they become over or under inclusive. For example, if the concern is about stopping certain illegal content, a network provider should not block a particular application to all users if that application transmits both legal and illegal content.

Such an analysis would recognize the importance of legitimate network management techniques while giving the Commission the framework to analyze carriers actions on a case-by-case basis. As we move into an era in which network operators are taking particularized actions against individual applications and content, the Commission should evaluate such practices under sufficient scrutiny to ensure that whatever actions the operators are taking are actually furthering a legitimate purpose and are narrowly tailored to serving that legitimate purpose.

# IV. PENDING COMCAST COMPLAINT

Consumers have alleged that certain operators, and specifically Comcast, are blocking and/or degrading consumers' access to the Internet by distinguishing between applications.

The Commission has heard from several engineers and technical experts who have raised questions regarding the network management techniques used by Comcast for peer-to-peer traffic.

The Commission is still investigating these complaints and we have not yet determined whether the actions violated our principles protecting consumer access to the Internet. However, Comcast appears to have utilized Internet equipment from Sandvine or something similar that is widely known to be a relatively inexpensive, blunt means to reduce peer-to-peer traffic by blocking certain traffic completely. In contrast, more modern equipment can be finely tuned to slow traffic to certain speeds based on various levels of congestion.

Specifically, this equipment (1) blocks certain attempts by subscribers to upload information using particular legal peer-to-peer applications by pretending to be the subscriber's computer and falsifying a "reset" packet to end the communication, and (2) degrades the corresponding attempts to download information using the same peer-to-peer applications.

Based on the testimony we have received thus far, I think it is important to clarify a few points.

Contrary to some claims, it does not appear that cable modem subscribers had the ability to do anything they wanted on the Internet. Specifically, based on the testimony we have

received thus far, some users were not able to upload anything they wanted and were unable to fully use certain file sharing software from peer-to-peer networks.

Contrary to some claims, it does not appear this network management technique is "content agnostic." Indeed, Comcast has publicly stated that it will migrate to a "protocol" (content) agnostic approach to traffic management in the future, and thus conceded that the techniques currently in use are not "content agnostic."

Contrary to some claims, it does not appear that this technique was used only to occasionally delay traffic at particular nodes suffering from network congestion at that time. Indeed, based on the testimony we have received thus far, this equipment is typically deployed over a wider geographic or system area and would therefore have impacted numerous nodes within a system simultaneously. Moreover, the equipment apparently used does not appear to have the ability to know when an individual cable segment is congested. It appears that this equipment blocks the uploads of at least a large portion of subscribers in that part of the network, regardless of the actual levels of congestion at that particular time.

Finally, contrary to some claims, it is not clear when they will actually stop using their current approach. They claim that they will deploy this new solution by the end of the year but it is unclear whether they will be finished deploying their solution or just starting that migration. Indeed the question is not when they will begin using a new approach but if and when they are committing to stop using the old one.

# V. NEXT STEPS

As the Commission continues its investigation into the complaints before it, the most important and first step that we can take in fulfilling our responsibility is to make sure that we are fully informed. At the very least, we need to obtain greater information to more fully understand what is happening and what impact operators' actions are having so that we may better evaluate the reasonableness of any network management practices at issue.